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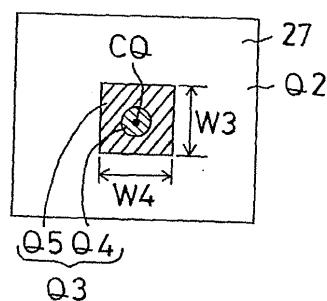
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(54) Automatic reflector tracking apparatus

(57) The present invention comprises an illumination portion (11), which is disposed in a surveying machine body (8), for illuminating measurement light toward a reflector (2), a light receiving portion (12), which is disposed in the surveying machine body (8), having an image sensor for receiving a reflection light image (M0) of the measurement light illuminated toward the reflector (2), arithmetic means (37) for calculating a position in an area (Q2) of the image sensor (27) for the reflection light image

(M0) from the reflector, and a rotation mechanism for rotating the survey machine body (8) so as to position the reflector (2) on a light receiving optical axis (02) of the light receiving portion (12) based on the position obtained by the arithmetic means (37), and a light receiving area (Q3) which is a smaller area than the area (Q2) of the image sensor (27) and has the light receiving optical axis (02) as a center is provided in the area (Q2) of the image sensor (27).

FIG. 5





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2	Place of search	Date of completion of the search	Examiner
	The Hague	22 September 2008	Dragomir, Adrian
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CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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